CONTENTS

VOLUME 48, NUMBER 1, JANUARY 1971

Composition and Structure of Glucofructans from Durum	
Wheat Flour. D. G. Medcalf and P. W. Cheung	1
Effect of Fiber on Availability of Protein from Wheat Shorts	
G. S. Ranhotra, F. N. Hepburn, and W. B. Bradley	9
Adsorption Kinetics of Water Vapor by Yellow Corn. I. Analysis of	
Kinetic Data for Sound Corn. Sun-Won Park, Do Sup Chung, and	
C. A. Watson	4
Note on the Use of Modified Salt in Doughs Containing Antimycotic Agents. Y. Pomeranz, M. D. Shogren, and K. F. Finney	
Agents. Y. Pomeranz, M. D. Shogren, and K. F. Finney	23
A Nutritional Evaluation of Corn Wet-Milling By-Products with Growing	
Chicks and Turkey Poults, Adult Roosters, and Turkeys, Rats, and Swine. H. S. Bayley, J. D. Summers, and S. J. Slinger	17
	. /
Bromide Residues in Flour Streams Milled from Fumigated Wheats. W. C. Shuey, V. L. Youngs, and M. E. Getzendaner	2 1
Hallingting of Mathiania, in Fanis by Canadan Date C Vannai	
and G. Zimmermann	ın
Composition and Utilization of Milled Barley Products, I. Gross	PU
Composition of Roller-Milled and Air-Separated Fractions, Y,	
Pomeranz, Helen Ke, and A. B. Ward	17
Rheological Studies of Dough with the Hoeppler Consistemeter. J.	
Prihoda, J. Hampl, and S. Karlova	9
Effects of Ascorbic Acid and Potassium Bromate on Viscous Properties	-
of Dough Measured with a Hoeppler Consistometer, J. Prihoda.	
J. Hampl, and J. Holas	8
Pigment Characterization in Grain Sorghum, II. White Varieties.	
W. K. Nip and E. E. Burns	4
Note on the Relative Effects of Monoglycerides on the Gelatinization	
of Wheat Starch. R. W. Longley and B. S. Miller	1
A Note on Sample Size Error in the Falling Number Test, K. H.	
Tipples	5
Erratum (Vol. 47, p. 422, M. Calderon, S. Navarro, and Z. Lindner) 9	0
VOLUME 48, NUMBER 2, MARCH/APRIL 1971	
A Process for Producing Nontoxic Rapeseed Protein Isolate and an Acceptable Feed By-Product. D. F. Owen, C. O. Chichester, J. Granadino C., and F. Mönckeberg	1
Comparison of Proteolysis in Five Malting Barley Varieties. R. S. Bhatty	7
Chlorination and Water-Solubles Content in Flours of Soft Wheat Varieties.	
L. T. Kissell	2
Internal Damage of Wheat Kernels by Successive Wetting and Drying Cycles.	
D. S. Chung and H. H. Converse	3
Purification of Zein on a Laboratory Scale by Charcoal or Gel Filtration.	
L. A. Danzer and E. D. Rees	3

CONTENTS

VOLUME 48, NUMBER 1, JANUARY 1971

Composition and Structure of Glucofructans from Durum	
Wheat Flour. D. G. Medcalf and P. W. Cheung	1
Effect of Fiber on Availability of Protein from Wheat Shorts	
G. S. Ranhotra, F. N. Hepburn, and W. B. Bradley	9
Adsorption Kinetics of Water Vapor by Yellow Corn. I. Analysis of	
Kinetic Data for Sound Corn. Sun-Won Park, Do Sup Chung, and	
C. A. Watson	4
Note on the Use of Modified Salt in Doughs Containing Antimycotic Agents. Y. Pomeranz, M. D. Shogren, and K. F. Finney	
Agents. Y. Pomeranz, M. D. Shogren, and K. F. Finney	23
A Nutritional Evaluation of Corn Wet-Milling By-Products with Growing	
Chicks and Turkey Poults, Adult Roosters, and Turkeys, Rats, and Swine. H. S. Bayley, J. D. Summers, and S. J. Slinger	17
	. /
Bromide Residues in Flour Streams Milled from Fumigated Wheats. W. C. Shuey, V. L. Youngs, and M. E. Getzendaner	2 1
Hallingting of Mathiania, in Fanis by Canadan Date C Vannai	
and G. Zimmermann	ın
Composition and Utilization of Milled Barley Products, I. Gross	PU
Composition of Roller-Milled and Air-Separated Fractions, Y,	
Pomeranz, Helen Ke, and A. B. Ward	17
Rheological Studies of Dough with the Hoeppler Consistemeter. J.	
Prihoda, J. Hampl, and S. Karlova	9
Effects of Ascorbic Acid and Potassium Bromate on Viscous Properties	-
of Dough Measured with a Hoeppler Consistometer, J. Prihoda.	
J. Hampl, and J. Holas	8
Pigment Characterization in Grain Sorghum, II. White Varieties.	
W. K. Nip and E. E. Burns	4
Note on the Relative Effects of Monoglycerides on the Gelatinization	
of Wheat Starch. R. W. Longley and B. S. Miller	1
A Note on Sample Size Error in the Falling Number Test, K. H.	
Tipples	5
Erratum (Vol. 47, p. 422, M. Calderon, S. Navarro, and Z. Lindner) 9	0
VOLUME 48, NUMBER 2, MARCH/APRIL 1971	
A Process for Producing Nontoxic Rapeseed Protein Isolate and an Acceptable Feed By-Product. D. F. Owen, C. O. Chichester, J. Granadino C., and F. Mönckeberg	1
Comparison of Proteolysis in Five Malting Barley Varieties. R. S. Bhatty	7
Chlorination and Water-Solubles Content in Flours of Soft Wheat Varieties.	
L. T. Kissell	2
Internal Damage of Wheat Kernels by Successive Wetting and Drying Cycles.	
D. S. Chung and H. H. Converse	3
Purification of Zein on a Laboratory Scale by Charcoal or Gel Filtration.	
L. A. Danzer and E. D. Rees	3

Effects of Proteolytic Enzymes on Gluten as Measured by a Stretching Test.	
J. E. Kruger	!1
New Starches. Properties of Five Varieties of Cowpea Starch. E. Tolmasquim,	
A. M. N. Correa, and S. T. Tolmasquim	12
Effect of Storage Studies of Microorganisms on Gamma-Irradiated Rice.	
H. Ito, S. Shibabe, and H. Iizuka	.(
Gelation Phenomena of Soybean Globulins. II. Protein-Water Miscible Solvent	
Interactions. N. Catsimpoolas and E. W. Meyer	(
Gelation Phenomena of Soybean Globulins. III. Protein-Lipid Interactions.	
N. Catsimpoolas and E. W. Meyer	9
Studies on the Extraction and Composition of Rice Endosperm Glutelin and Prolamin.	
Evelyn Mae S. Tecson, Bernardita V. Esmama, Leni P. Lontok, and B. O. Juliano 16	8
Preparation and Characterization of Coconut Protein Isolates. A. S. Samson S. J.,	
C. M. Cater, and K. F. Mattill	2
Functional (Breadmaking) and Biochemical Properties of Wheat Flour Components. VIII.	
Starch. R. C. Hoseney, K. F. Finney, Y. Pomeranz, and M. D. Shogren	1
Erratum (Vol. 47, p. 671, Constance Kies and Hazel M. Fox)	0

VOLUME 48, NUMBER 3, MAY-JUNE 1971

Optical Rotatory Dispersion, Circular Dichroism, and Infrared	
Studies of Wheat Gluten Proteins in Various Solvents. J. E. Cluskey and Y. V. Wu 203	3
Water-Binding Capacity of Wheat Flour Crude Pentosans and Their Relation	
to Mixing Characteristics of Dough. S. L. Jelaca and I. Hlynka	
Petroleum Ether-Soluble Lipoprotein of Barley Flour. R. C. Hoseney,	
Y. Pomeranz, J. D. Hubbard, and K. F. Finney	5
Effect of Phytate on Isoelectric Focusing of Soybean Whey Proteins. L. C. Wang 229	,
Studies with Radioactive Tracers. XVII. Model Browning Reactions between	
Glycine and D-Glucose. C. C. Lee and Y. H. Liau	3
Effects of Chlorine on Flour Proteins, Dough Properties, and Cake Quality.	
C. C. Tsen, K. Kulp, and C. J. Daly 247	
Changes in Barley Kernels During Growth and Maturation, A. W. MacGregor,	
D. E. LaBerge, and W. O. S. Meredith	1
Automated Determination of Reducing Sugar and Sucrose in Food Products.	
R. E. Oborn, R. A. Libby, J. M. Ernst, and J. C. Henderson	1
Rapid Biuret Method for Protein Content in Grains. R. M. Johnson and	
Carolee E. Craney	
Polysorbate 60: Effects in Bread. R. K. Langhans and W. G. Thalheimer	
Nutritive Quality of Wheat Flour and Bread Supplemented with Either Fish	
Protein Concentrate or Lysine. B. R. Stillings, V. D. Sidwell, and O. A. Hammerle 292	
Isoelectric Point Differences in Commercial Soybean Trypsin Inhibitors. L. C. Wang 303	
A Method for Phytic Acid Determination in Wheat and Wheat Fractions.	
E. L. Wheeler and R. E. Ferrel 312	
Tryptophan in Soybean Meal and Soybean Whey Proteins. D. J. Sessa,	
K. J. Abbey, and J. J. Rackis 321	
Effect of Chemical Additives on the Functional Properties of Plain and 0.05%	
Yolk-Contaminated Spray-Dried Albumen. Carolyn M. Anderson, Mary E. Zabik,	
and Zenia L. Hawrysh	
Changes in the Protein Fractions of Developing Normal and opaque-2	
Maize Endosperm. J. J. Murphy and A. Dalby	

VOLUME 48, NUMBER 4, JULY-AUGUST 1971

Electron Spin Resonance Study of Stable Free Radicals in Wheat. J. J. Windle	
and J. J. Evans	351
Distribution of Tocopherols in Wet- and Dry-Milled Corn Products. G. W. Grams, C. W.	
Blessin, and G. E. Inglett	356
Denaturation of Soybean Proteins by Isoelectric Precipitation. A. M. Nash, W. F. Kwolek,	
and W. J. Wolf	360
Nutrient Composition of Selected Wheats and Wheat Products. VII. Total and Free Niacin.	
F. N. Hepburn	369
Lysine-Infused Popcorn. C. W. Blessin, J. F. Cavins, and G. E. Inglett	
Availability of Iron in Enriched Bread. G. S. Ranhotra, F. N. Hepburn, and W. B. Bradley.	377
Laboratory Wet-Milling of Corn Containing High Levels of Aflatoxin and a Survey of	
Commercial Wet-Milling Products. K. R. Yahl, S. A. Watson, R. J. Smith, and R.	
Barabolok	385
Effect of Fumigation on Wheat in Storage. III. Vitamin B-6 Components of Wheat and	
	392
Performance of Wheat and Other Starches in Reconstituted Flours. W. F. Sollars and G. L. Rubenthaler	397
Iron, Zinc, Manganese, and Copper Content of Semidwarf Wheat Varieties Grown	
Under Different Agronomic Conditions. G. A. Ghanbari and M. S. Mameesh	411
The Characterization of Triticale Starch and Its Comparison with Starches of Rye,	
Durum, and HRS Wheat. C. P. Berry, B. L. D'Appolonia and K. A. Gilles	415
Pentosans Associated with Gluten. B. L. D'Appolonia and K. A. Gilles	
Starch Gelatinization as Detected by Proton Magnetic Resonance. E. Jaska	437
Communication to the Editor: A Specific Color Reaction of Albumin, Globulin, and	
Gliadin Preparations from Wheat. V. Silano and F. Pocchiari	445
Glutenin in Developing Wheat Grain. W. Bushuk and C. W. Wrigley	448
Nutritive Value of Protein in Hominy Feed Fractions. J. S. Wall, C. James, and J. F.	
Cavins	456
Rapid Test for Screening of Wheat Grains for Tyrosinase Activity. Y. P. Abrol, D. C.	
Uprety, and S. Tikoo	
Erratum (Vol. 48, p. 191, R. C. Hoseney, K. F. Finney, Y. Pomeranz, and M. D. Shogren).	468

VOLUME 48, NUMBER 5, SEPTEMBER-OCTOBER 1971

Evidence for Glutenin in Wheat: Stability Toward Dissociating Forces. F. R. Huebner	
and J. A. Rothfus	469
Milling Properties of Sorghum Grain with Different Proportions of Corneous to Floury	
Endosperm. E. D. Maxson, W. B. Fryar, L. W. Rooney, and M. N. Krishnaprasad 4	478
Separation of alpha- and beta-Amylase Enzymes from Barley Malt by Ion-Exchange	
Chromatography. A. W. MacGregor, D. E. LaBerge, and W. O. S. Meredith	490
Dry-Milling of Opaque-2 (High Lysine) Corn. O. L. Brekke, E. L. Griffin, Jr., and	
P. Brooks	499
Purification and Some Properties of Malted-Wheat BAPA-ase. J. E. Kruger	
Heterogeneity of Soybean Trypsin Inhibitors. II. Heat Inactivation, T. Obara and	
Y. Watanabe	523

VOLUME 48, NUMBER 6, NOVEMBER-DECEMBER 1971

Activity Patterns of Three Peptide Hydrolases and an Amidase during Malting and	
Brewing. N. Prentice, W. C. Burger, and Mary Moeller	587
Sensory Evaluation of Commercial Soy Flours, Concentrates, and Isolates. J. E. Kalbrener,	
A. C. Eldridge, Helen A. Moser, and W. J. Wolf	595
Apolar Interactions of α-Gliadin: Binding of 2-p-Toluidinylnaphthalene-6-Sulfonate.	
	601
Application of Muller's Method to Extensigraph Measurements with Various Hook Speeds.	
	609
	620
	625
Proteolytic Activity of Maturing Wheat Grain. W. Bushuk, Paulina Hwang, and C. W.	
	637
Laboratory Evaluation of Hexane: Alcohol Azeotrope-Extracted Soybean Flakes as a	
Source for Bland Protein Isolates. A. C. Eldridge, J. E. Kalbrener, Helen A. Moser,	
D. H. Honig, J. J. Rackis, and W. J. Wolf	640
Comparison of Starch from Triticale and its Parental Species. A. J. Klassen and R. D. Hill .	647
Effects of Flour Lipids on Cookie Quality. L. T. Kissell, Y. Pomeranz, and W. T. Yamazaki	655
Effect of Planting Date and Southern Corn Leaf Blight on the Fatty Acid Composition of	
	663
Internal Pressure in Yeasted Dough. H. Matsumoto, Junko Nishiyama, and I. Hlynka	669
Differences in Amino Acid Sequences of Gliadin and Glutenin. J. A. Bietz and J. A.	
Rothfus	677
The Protein Content and Amino Acid Composition of Sorghum Grain. M. Haikerwal and	
	690
Supplemental Effect of Wheat Protein Concentrate on the Protein Quality of White	
Wheat Flour. G. S. Ranhotra, F. N. Hepburn, and W. B. Bradley	699

Wheat Protein-Starch Interaction. I. Some Starch-Binding Effects of Wheat Flour Proteins. L. K. Dahle	706
A Note on Changes in Peptide Hydrolase, Esterase and Amidase of Maturing Barley, N.	
	714
Note on the Effect of Vital Gluten on Some Rheological Properties of Dough. J. Prihoda	
and W. Bushuk	717
A Note on Determining Protein Contents in Various Wheat Flours and Flour Streams by	
the Kjeldahl and by Neutron-Activation Methods. C. C. Tsen and E. E. Martin	721
Author Index Vol. 48	727
Subject Index Vol. 48	732
Editorial Boliss	
Editorial Policy	ii

North Central Publishing Co. St. Paul, Minnesota

INDEX TO VOLUME 48

AUTHOR INDEX

	Page		Page
Abbey, K. J. (see D. J. Sessa) Abrol, Y. P., D. C. Uprety, and S. Tikoo. Rapid test for screening of	321	Cruz, and B. O. Juliano. Free amino acids in the bleeding sap and developing grain of the rice	
wheat grains for tyrosinase activity Anderson, Carolyn M., Mary E.	466	plant	533
Zabik, and Zenia L. Hawrysh.		Lindner. Erratum for Vol. 47, pp.	
Effect of chemical additives on		422 and 425	90
the functional properties of plain		Cater, C. M. (see A. S. Samson) Catsimpoolas, N., and E. W. Meyer.	182
and 0.05% yoke-contaminated spray-dried albumen	328	Gelation phenomena of soybean	
Anderson, R. A. (see C. W. Blessin)	528	globulins. II. Protein-water	
The state of the brown, it		miscible solvent interactions	150
		and Gelation	
		phenomena of soybean globulins.	
Barabolok, R. (see K. R. Yahl)	385	III. Protein-lipid interactions	159
Bayley, H. S., J. D. Summers, and S.		Cavins, J. F. (see C. W. Blessin)	373
J. Slinger. A nutritional		(see J. S. Wall)	456
evaluation of corn wet-milling		Cheung, P. W. (see D. G. Medcalf)	1
by-products with growing chicks		Chichester, C. O. (see D. F. Owen)	91
and turkey poults, adult roosters,	27	Christianson, D. D., A. C. Stringfellow, D. Burdick, and G.	
and turkeys, rats, and swine Berry, C. P., B. L. D'Appolonia, and	21	E. Inglett. Endosperm	
K. A. Gilles. The characterization		fragmentation of ordinary and	
of Triticale starch and its		high-lysine corn dry-milled	
comparison with starches of rye,		products improved by isotonic	
durum, and HRS wheat	415	buffer conditioning	558
Bhatty, R. S. Comparison of		Chung, D. S., and H. H. Converse.	
proteolysis in five malting barley		Internal damage of wheat kernels	
varieties	97	by successive wetting and drying	
Bietz, J. A., and J. A. Rothfus.		cycles	108
Differences in amino acid	(22	(see Sun-Won Park)	14
sequences of gliadin and glutenin.	677	Cluskey, J. E., and Y. V. Wu. Optical	
Blessin, C. W., R. A. Anderson, W. L.		rotatory dispersion, circular dichroism, and infrared studies of	
Deatherage, and G. E. Inglett. Effect of alkali dehulling on		wheat gluten proteins in various	
composition and wet-milling		solvents	203
characteristics of sorghum grain	528	Converse, H. H. (see D. S. Chung)	108
, J. F. Cavins, and G. E.		Corrêa, A. M. N. (see E. Tolmasquim)	132
Inglett. Lysine-infused popcorn	373	Craney, Carolee E. (see R. M.	
(see G. W. Grams)	356	Johnson)	276
Bradley, W. B. (see G. S. Ranhotra) 9,	377,	Cruz, Lourdes J. (see Gloria B.	
	699	Cagampang)	533
Brekke, O. L., E. L. Griffin, Jr., and			
P. Brooks. Dry-milling of	400	Dahle, L. K. Wheat protein-starch	
opaque-2 (high lysine) corn	499	interaction. I. Some	
Brooks, P. (see O. L. Brekke)	499 558	starch-binding effects of	706
Burdick, D. (see D. D. Christianson). Burger, W. C. (see N. Prentice)	587	wheat-flour proteins	336
Burns, E. E. (see W. K. Nip)	74	Dalby, A. (see J. J. Murphy) Daly, C. J. (see C. C. Tsen)	247
Bushuk, W., Paulina Hwang, and C.	, ,	Danzer, L. A., and E. D. Rees.	241
W. Wrigley. Proteolytic activity of		Purification of zein on a	
maturing wheat grain	637	laboratory scale by charcoal or gel	
, and C. W. Wrigley.		filtration	118
Glutenin in developing wheat grain	448	D'Appolonia, B. L., and K. A. Gilles.	
(see J. Prihoda)609,	717	Effect of various starches in bak-	
		ing	625
		and Pentosans	
Cagampang, Gloria B., Lourdes J.		associated with gluten	427

(see C. P. Berry) 415	products. VII. Total and free nia-
Deatherage, W. L. (see C. W. Blessin) 528	cin 36
	(see G. S. Ranhotra) 9, 377, 69
PILIL A C I P V-II	Hill, R. D. (see A. J. Klassen) 64
Eldridge, A. C., J. E. Kalbrener,	Hlynka, I. (see S. L. Jelaca) 21
Helen A. Moser, D. H. Honig, J. J.	(see H. Matsumoto) 669
Rackis, and W. J. Wolf.	Holas, J. (see J. Příhoda) 68
Laboratory evaluation of	Honig, D. H. (see A. C. Eldridge) 640
hexane: alcohol azeotrope-ex-	Hoseney, R. C., K. F. Finney, Y.
tracted soybean flakes as a source	Pomeranz, and M. D. Shogren.
for bland protein isolates 640	Functional (breadmaking) and
(see J. E. Kalbrener) 595 Ernst, J. M. (see R. E. Oborn) 270	biochemical properties of wheat
	flour components. VIII. Starch 191
Esmama, Bernardita V. (see Evelyn Mae S. Tecson)	, Y. Pomeranz, J. D.
Mae S. Tecson)	Hubbard, and K. F. Finney.
Evans, 3. 3. (see 3. 3. windle)	Petroleum ether-soluble
Ferrel, R. E. (see E. L. Wheeler) 312	lipoprotein of barley flour 223
Finney, K. F., C. C. Tsen, and M. D.	Hubbard, J. D. (see R. C. Hoseney) 223
Shogren. Cysteine's effect on	Huebner, F. R., and J. A. Rothfus.
mixing time, water absorption,	Evidence for glutenin in wheat:
oxidation requirement, and loaf	Stability toward dissociating
volume of Red River 68 540	forces
(see R. C. Hoseney) 191, 223	Hwang, Paulina (see W. Bushuk) 637
(see Y. Pomeranz) 23	
Fox, Hazel M. (see Constance Kies) . 190	Iizuka, H. (see H. Ito) 140
Fryar, W. B. (see E. D. Maxson) 478	Inglett, G. E. (see C. W. Blessin) 373, 528
	(see D. D. Christianson) 558
Getzendaner, M. E. (see W. C. Shuey) 34	(see G. W. Grams) 356
Ghanbari, H. A., and M. S. Mameesh.	Irvine, G. N. (see R. R. Matsuo) 554
Iron, zinc, manganese, and copper	Ito, H., S. Shibabe, and H. Iizuka.
content of dwarf wheat varieties	Effect of storage studies of
grown under different agronomic	microorganisms on
conditions 411	gamma-irradiated rice 140
Gilles, K. A. (see C. P. Berry) 415	James, C. (see J. S. Wall) 456
(see B. L. D' Appolonia) 427, 625	,
(see D. E. Walsh) 544	Jaska, E. Starch gelatinization as detected by proton magnetic
Grams, G. W., C. W. Blessin, and G.	resonance
E. Inglett. Distribution of	Jelaca, S. L., and I. Hlynka.
tocopherols in wet- and	Water-binding capacity of wheat
dry-milled corn products 356 Granadino C., J. (see D. F. Owen) 91	flour crude pentosans and their
	relation to mixing characteristics
Greene, F. C., and D. D. Kasarda.	of dough 211
Apolar interactions of α -gliadin: Binding of 2-p-toluidinylnaphthal-	Jellum, M. D. Effect of planting date
ene-6-sulfonate 601	and southern corn leaf blight on
Griffin, E. L., Jr. (see O. L. Brekke) . 499	the fatty acid composition of
Official, L. L., St. (See O. L. Dierre) . 433	corn oil 663
Haikerwal, M., and A. R. Mathieson.	Johansen, R. G., and S. S. Voris.
The protein content and amino	GLC determination of cholesterol
acid composition of sorghum grain 690	as an index of egg content in
Hammerle, O. A. (see B. R. Stillings) 292	baked goods 576
Hampl, J. (see J. Přihoda)59, 68	Johnson, R. M., and Carolee E.
Hawrysh, Zenia L. (see Carolyn M.	Craney. Rapid biuret method for
Anderson) 328	protein content in grains 276
Henderson, J. C. (see R. E. Oborn) 270	Juliano, B. O. (see Gloria M. Cagamp-
Hepburn, F. N. Nutrient composition	ang) 533
of selected wheats and wheat	——— (see Evelyn Mae S. Tecson) 168

Kalbrener, J. E., A. C. Eldridge, Helen A. Moser, and W. J. Wolf. Sensory evaluation of commercial		barley kernels during growth and maturation, and	255
soy flours, concentrates, and iso-		Separation of α - and β -amylase	
lates	. 595	enzymes from barley malt by	
(see A. C. Eldridge)		ion-exchange chromatography	490
Karlová, S. (see J. Prihoda)		MacRitchie, F. (see J. W. Lee)	620
Kasarda, D. D. (see F. C. Greene)		Mameesh, M. S. (see H. A. Ghanbari)	411
Ke, Helen (see Y. Pomeranz)		Martin, E. E. (see C. C. Tsen)	721
Kies, Constance. Erratum for Vol.		Mathieson, A. R. (see M. Haikerwal).	690
47, p. 671	190	Matsumoto, H., Junko Nishiyama,	
Kissell, L. T. Chlorination and		and I. Hlynka. Internal pressure in	
water-solubles content in flours of		yeasted dough	669
soft wheat varieties	102	Matsuo, R. R., and G. N. Irvine. Note	
, Y. Pomeranz, and W. T.		on an improved apparatus for	
Yamazaki. Effects of flour lipids		testing spaghetti tenderness	554
on cookie quality	655	Mattil, K. F. (see A. S. Samson)	182
Klassen, A. J., and R. D. Hill.		Maxson, E. D., W. B. Fryar, L. W.	
Comparison of starch from		Rooney, and M. N.	
triticale and its parental species	647	Krishnaprasad. Milling properties	
Krishnaprasad, M. N. (see E. D. Max-		of sorghum grain with different	
son	478	proportions of corneous to floury	
Kruger, J. E. Effects of proteolytic		endosperm	478
enzymes on gluten as measured		Medcalf, D. G., and P. W. Cheung.	
by a stretching test	121	Composition and structure of glucofructans from durum wheat	
Purification and some		flour	1
properties of malted-wheat BAPA-		Meredith, W. O. S. (see A. W. MacGre-	
ase	512	gor)	, 490
Kulp, K. (see C. C. Tsen)	247	Meyer, E. W. (see N. Catsimpoolas) 150.	, 159
Kwolek, W. F. (see A. M. Nash)	360	Miller, B. S. (see R. W. Longley)	81
		Moeller, Mary (see N. Prentice) 587,	714
		Moser, Helen A. (see J. E. Kalbrener)	595
		(see A. C. Eldridge)	640
LaBerge, D. E. (see A. W. MacGregor)	255,	Murphy, J. J., and A. Dalby. Changes	
	490	in the protein fractions of	
Langhans, R. K., and W. G.		developing normal and opaque-2	
Thalheimer. Polysorbate 60:		maize endosperm	336
Effects in bread	283		
Lee, C. C., and Y. H. Liau. Studies		Nash, A. M., W. F. Kwolek, and W. J.	
with radioactive tracers. XVII.		Wolf. Denaturation of soybean	
Model browning reactions		proteins by isoelectric precipita-	
between glycine and D-glucose	238	tion	360
Lee, J. W., and F. MacRitchie. The		Navarro, S. (see M. Calderon)	90
effect of gluten protein fractions		Nip, W. K., and E. E. Burns. Pigment	
on dough properties	620	characterization in grain sorghum.	
Liau, Y. H. (see C. C. Lee)	238	II. White varieties	74
Libby, R. A. (see R. E. Oborn)	270	Nishiyama, Junko (see H. Matsumoto)	669
Lindner, Z. (see M. Calderon)	90		
Longley, R. W., and B. S. Miller.		Ol T 1 W W-41-	
Note on the relative effects of		Obara, T., and Y. Watanabe.	
monogly cerides on the	6.1	Heterogeneity of soybean trypsin	522
gelatinization of wheat starch	81		523
Lontok, Leni P. (see Evelyn Mae S.	160	Oborn, R. E., R. A. Libby, J. M.	
Tecson)	168	Ernst, and J. C. Henderson.	
		Automated determination of	
MacGregor, A. W., D. E. LaBerge,		reducing sugar and sucrose in	270
and W. O. S. Meredith. Changes in		food products	270

Owen, D. F., C. O. Chichester, J.	Ranhotra, G. S., F. N. Hepburn, and	
Granadino C., and F. Mönckeberg	W. B. Bradley. Availability of the	
B. A process for producing	iron in enriched bread	377
nontoxic rapeseed protein isolate	,, and	
and an acceptable feed by-product	91, Effect of fiber on	
, p, p	availability of protein from wheat	
Park, Sun-Won, D. S. Chung, and C.	shorts	9
A. Watson. Adsorption kinetics of	, and	-
	Constructed offers of	
water vapor by yellow corn. I.		
Analysis of kinetic data for sound	wheat protein concentrate on the	
corn	14 protein quality of white wheat	
Pocchiari, F. (see V. Silano) 4	445 flour	699
Polansky, Marilyn M., and E. W.	Rees, E. D. (see L. A. Danzer)	118
Toepfer. Effect of fumigation on	Riggs, J. K. (see R. D. Sullins)	567
wheat in storage. III. Vitamin B-6	Rooney, L. W. (see E. D. Maxson)	478
components of wheat and wheat	(see R. D. Sullins)	567
	Rothfus, J. A. (see J. A. Bietz)	677
Pomeranz, Y., Helen Ke, and A. B.	(see F. R. Huebner)	469
	Rubenthaler, G. L. (see W. F. Sollars)	397
Ward. Composition and	Rubellulaiel, G. L. (see W. F. Sonars)	371
utilization of milled barley		
products. I. Gross composition of	Samson, A. S., S. J., C. M. Cater,	
roller-milled and air-separated frac-	and K. F. Mattil. Preparation and	
tions	47 characterization of coconut	
, M. D. Shogren, and K. F.	protein isolates	182
Finney. Note on the use of	Sessa, D. J., K. J. Abbey, and J. J.	
modified salt in doughs	Rackis. Tryptophan in soybean	
containing antimycotic agents	23 meal and soybean whey proteins	321
		140
(see R. C. Hoseney) 191, 2		-
	Shogren, M. D. (see K. F. Finney)	540
(see N. Prentice) 7	(see R. C. Hoseney)	191
Prentice, N., W. C. Burger, and Mary	(see Y. Pomeranz)	23
Moeller. Activity patterns of three	Shuey, W. C., V. L. Youngs, and M.	
peptide hydrolases and an	E. Getzendaner. Bromide residues	
amidase during malting and brew-	in flour streams milled from	
	fumigated wheats	34
, Mary Moeller, and Y.		292
	Silano, V., and F. Pocchiari.	
Pomeranz. A note on changes in		
peptide hydrolase, esterase, and	Communication to the Editor: A	
VI .	specific color reaction of albumin,	
Prihoda, J., and W. Bushuk.	globulin, and gliadin preparations	
Application of Muller's method to		445
extensigraph measurements with	Slinger, S. J. (see H. S. Bayley)	27
	509 Smith, R. J. (see K. R. Yahl)	385
, and Note on	Sollars, W. F., and G. L. Rubenthaler.	
the effect of vital gluten on some	Performance of wheat and other	
		397
	starches in reconstituted flours Stillings, B. R., V. D. Sidwell, and O.	371
, J. Hampl, and J. Holas.		
Effects of ascorbic acid and	A. Hammerle. Nutritive quality of	
potassium bromate on viscous	wheat flour and bread	
properties of dough measured	supplemented with either fish	
	68 protein concentrate or lysine	292
, and S.	Stringfellow, A. C. (see D. D. Chris-	
Karlova. Rheological studies of	tianson)	558
dough with the Hoeppler	Sullins, R. D., L. W. Rooney, and J.	-
consistome ter		
Packie I I (see A C Eldridge)	kernel during reconstitution of sorghum grain	567
		567
(see D. J. Sessa) 3	Summers, J. D. (see H. S. Bayley)	27

Tecson, Evelyn Mae S., Bernardita V. Esmama, Leni P. Lontok, and B. O. Juliano. Studies on the		Walsh, D. E., and K. A. Gilles. The influence of protein composition on spaghetti quality	544
extraction and composition of rice endosperm glutelin and prola-		Wang, L. C. Effect of phytate on isoelectric focusing of soybean	
min	168	whey proteins	229
hans)	283	differences in commercial	
Tikoo, S. (see Y. P. Abrol)	466	soybean trypsin inhibitors	303
Tipples, K. H. A note on sample size		Ward, A. B. (see Y. Pomeranz)	47
error in the falling number test	85	Watanabe, Y. (see T. Obara)	523
Toepfer, E. W. (see Marilyn M. Polan-		Watson, C. A. (see Sun-Won Park)	14
sky)	392	Watson, S. A. (see K. R. Yahl)	385
Tolmasquim, E., A. M. N. Corrêa,		Wheeler, E. L., and R. E. Ferrel. A	
and S. T. Tolmasquim. New		method for phytic acid	
starches. Properties of five		determination in wheat and wheat	
varieties of cowpea starch	132	fractions	312
Tolmasquim, S. T. (see E. Tolmas-		Windle, J. J., and J. J. Evans.	
quim)	132	Electron spin resonance study of	
Tsen, C. C., K. Kulp, and C. J. Daly.		stable free radicals in wheat	
Effects of chlorine on flour		Wolf, W. J. (see A. C. Eldridge)	640
proteins, dough properties, and		(see J. E. Kalbrener)	595
cake quality	247	Wrigley, C. W. (see W. Bushuk) 448,	637
, and E. E. Martin. A note		Wu, Y. V. (see J. E. Cluskey)	203
on determining protein contents			
in various wheat flours and flour			
streams by the Kjeldahl and by		Yahl, K. R., S. A. Watson, R. J.	
neutron-activation methods	721	Smith, and R. Barabolok.	
(see K. F. Finney)	540	Laboratory wet-milling of corn containing high levels of aflatoxin and a survey of commercial	
Uprety, D. C. (see Y. P. Abrol)	466	wet-milling products	385
opicty, D. C. (see 1.11.1see)	.00	Yamazaki, W. T. (see L. T. Kissell)	655
Voris, S. S. (see R. G. Johansen)	576	Yannai, S., and G. Zimmermann. Utilization of methionine in fonio by growing rats	40
Wall, J. S., C. James, and J. F. Cavins. Nutritive value of protein in	456	T. O. O. V. D.	40
hominy feed fractions	456	Zimmermann, G. (see S. Yannai)	40

SUBJECT INDEX

	Page	Ascorbic acid, and dough consistency	
Absorption; and pressure of yeasted dough (Matsumoto et al.)	669	(Prihoda et al.)	68 47
Adsorption kinetics of water vapor by yellow corn (a series): I (Park			
et al.)	14		
Aflatoxin, in wet-milled corn		Barley	
fractions (Yahl et al.)	385	Amidase and peptide hydrolase; activity in malting and brewing (Prentice et al.)	587
of additives on (Anderson et al.) .	328	Brewing quality; proteolysis in five varieties (Bhatty)	97
Albumin		Enzyme changes during	
And spaghetti color (Walsh and		maturation (Prentice et al.)	714
Gilles)	544	Kernel; changes during growth	
Wheat flour; characterization by		and maturation (MacGregor et	
color reaction (Silano and		al.)	255
Pocchiari)	445	Lipoprotein; in petroleum ether extract of flour oil (Hoseney	222
Amino acids		et al.)	223
Barley, in malting and brewing	587	Malt; separation of amylase	
(Prentice et al.) Of coconut (Samson et al.)	182	enzymes from (MacGregor et al.)	490
In high-lysine corn fractions	102	Roller-milled products;	470
(Christianson et al.)	558	composition of (Pomeranz et	
In corn endosperm, normal and	550	al.)	47
opaque-2 (Murphy and Dalby) .	336	Starch; substitute for wheat in	
Glycine, see main entry		reconstituted flours (Sollars	
In hominy (Wall et al.) Lysine, see main entry	456	and Rubenthaler)	397
Rice; in bleeding sap and		Bran, wheat; electron spin resonance	
developing grain (Cagampang et		spectra of (Windle and Evans)	351
al.)	533		
Sorghum grain; content of U.S.		Bread and Breadmaking	
and Nigerian varieties		Antimycotic agents in dough;	
(Haikerwal and Mathieson)	690	method for (Pomeranz et al.)	23
Tryptophan, see main entry		Barley starch; role in (Hoseney et	191
Amidase, in maturing barley		al.)	191
(Prentice et al.)	714		247
(Figure of Ma)	,	(Tsen et al.)	241
Amylase, see Enzymes		Red River 68 flour (Finney et	
. 211y 1250, 500 2512y 11100		al.)	540
Amylopectin, content in starch;		Egg content of baked goods;	
detection of (Dahle)	706	measurement of (Johansen and Voris)	576
Anthocyanins, in white-seeded		Enzymes, proteolytic; effect on	
sorghum grain (Nip and Burns)	74	gluten (Kruger)	121
		Fish protein concentrate; as	
Antimycotics, in dough; method for		nutritional supplement	
baking (Pomeranz et al.)	23	(Stillings et al.)	292
		Fumigated and stored wheat	
Apigeninidin, sorghum grain (Nip and		products; effect on baking	202
Burns)	74	(Polansky and Toepfer)	392
		Fumigated wheat, flours from;	
Aroma, of soy flour isolates	505	baking quality of (Shuey et	24
(Kalbrener et al.)	595	al.)	34

Protein; changes in developing	Rheology; influence of gluten	
normal and opaque-2	protein fractions on (Lee and	
endosperm (Murphy and	MacRitchie)	620
Dalby)	Viscosity; calculation on	
Starch; in breadmaking (Hoseney	extensigraph by Muller's Method (Prihoda and Bushuk)	609
et al.)		003
proton magnetic resonance	Yeasted; measuring internal pressure of (Matsumoto et al.)	669
(Jaska)	pressure of (Matsumoto et al.)	007
Starch; substitute for wheat in	Durum, flour; structures of two	
reconstituted flours (Sollars	glucofructan series from (Medcalf	
and Rubenthaler) 397	and Cheung)	1
Tocopherols; distribution in wet-		
and dry-milled products		
(Grams et al.) 356		
Zein, see main entry		
	Effect of fumigation on wheat in	
Cowpea, starch; analysis of	storage (a series): III (Polansky	
(Tolmasquim et al.) 132	and Toepfer)	392
Custoing offeet on baking properties	Egg	
Cysteine; effect on baking properties of Red River 68 (Finney et al.) 540	Albumen; effect of additives on	
of Ros River oo (1 miley or all) 11 010	foaming of plain and	
Cystine; effect on stability of STI	yoke-contaminated (Anderson	328
chromatographic fractions (Obara	etal.)	320
and Watanabe) 523	quantitative measurement of	
	(Johansen and Voris)	576
	Endosperm, sorghum grain;	
	characteristics of corneous vs.	
	floury (Maxson et al.)	478
Dehulling; NaOH as agent for	•	
sorghum-grain (Blessin et al.) 528	Enrichment	
	Lysine infusion of popcorn	
Dough	(Blessin et al.)	373
Antimycotics; effect of	Iron, in bread (Ranhotra et al.)	377
capsulated salt on (Pomeranz et al.)	see also Nutritive value	
et al.)		
and Kulp) 247		
Conditioning; effect of	Enzymes	
Polysorbate 60 in bread	α-Amylase, Hagberg test;	
(Langhans and Thalheimer) 283	influence of sample size on	
Consistometer measurement of	(Tipples)	85
elasticity and viscosity	α-Amylase, barley kernel; changes	
(Pfihoda et al.) 59	during maturation (MacGregor	255
Effect of maturing agents on	et al.)	255
consistency, measurement of	α- and β-Amylase; separation from barley malt (MacGregor et al.)	490
(Prihoda et al.) 68	Amylase of triticale starch	170
Pentosans, water-binding; relation to mixing characteristics	(Klassen and Hill)	647
(Jelaca and Hlynka) 211	BAEE-ase (\alpha-benzoyl-L-arginine	3.7
Rheology; effect of vital gluten	ethyl esterase) malted wheat;	
on (Příhoda and Bushuk) 717	purification and properties of	
Rheology, effect of heat	(Kruger)	512
denaturation of protein on;	BAEE-ase, in maturing barley	
theory (Doble) 706	(Prontice et al.)	714

BAPA-ase (benzoyl-arginine-p-ni-		Bromide residue in streams from	
troanilide-ase); malted wheat;		fumigated wheats (Shue) et	2.4
purification and properties of	512	al.)	34
(Kruger)	312	Cake, see main entry	
BAPA-ase, in barley (Prentice et	714	Defatted; effect on cookie quality	655
al.)	, /14	(Kissell et al.)	655
Esterase, barley; in maturing plant	714	Electron spin resonance spectra of	251
(Prentice et al.)	/14	(Windle and Evans)	351
Esterase, barley; in malting and	507	Fumigants, see main entry	
brewing (Prentice et al.)	587	Gluten see main entry	
Peptide hydrolase, see BAPA-ase		Pentosans, crude; water-binding	
Peptide hydrolase, esterase, and		capacity of (Jelaca and	211
amidase of maturing barley	714	Hlynka)	211
(Prentice et al.)	714	Protein; analysis by specific color	
Pronase; in analysis of glutenin		reaction (Silano and Pocchiari)	445
and gliadin (Bietz and	(00	Protein content, determination	
Rothfus)	677	of; neutron-activation vs.	721
Proteolytic, in five malting barley	0.5	Kjeldahl (Tsen and Martin)	721
varieties (Bhatty)	97	Red River 68; effect of cysteine	
Proteolytic activity of maturing		on dough properties (Finney	- 40
wheat grain (Bushuk et al.)	637	et al.)	540
Tyrosinase, wheat-grain; rapid		Soybean; flavors and aroma of	
screening test for (Abrol et al.)	466	(Kalbrener et al.)	595
Ептата		Starch; comparison of hard red	
Calderon et al. (Vol. 47, p. 425) .	90	spring, durum, rye, and	415
Hoseney et al. (Vol. 48, p. 198) .	468	triticale (Berry et al.)	415
Kies and Fox (Vol. 47, p. 675)	190	Starch; effect of Polysorbate 60	
•		on bread (Langhans and	202
		Thalheimer)	283
		reconstituted flours (Sollars	207
Falling number test; sample-size error		and Rubenthaler)	397
in (Tipples)	85	Strength; relation to maturing agents measured (Prihoda et	
			60
Feed		al.)	68
See also Corn		yeasted dough (Matsumoto et	
Rapeseed by-product (Owen et	0.1		669
al.)	91	al.)	003
Sorghum grain; effect of		fish protein concentrate	
reconstitution on efficiency	***	(Stillings et al.)	292
(Sullins et al.)	567	Supplementation with wheat	292
		protein concentrate (Ranhotra	
Fermentation			699
See also Barley		et al.)	033
Dough; protection from	00	Fonio; as source of methionine	
antimycotics (Pomeranz et al.)	23	(Yannai and Zimmerman)	40
Fish protein concentrate; as		(I aidias and Emiliorinais)	40
nutritional supplement to wheat		Fructans; structures of two durum	
flour (Stillings et al.)	292	wheat flour glucofructans	
		(Medcalf and Cheung)	1
Flour (wheat unless otherwise		(1
specified)		Fumigation	
Barley; composition and		Methyl bromide residue in flour	
utilization of roller-milled		streams (Snuey et al.)	34
products (Pomeranz et al.)	47	Effect on vitamin B-6 in storage	54
Barley; lipoprotein isolate from		and baking (Polansky and	
flour oil (Hoseney et al.)	223	Toepfer)	392

Functional (breadmaking) and biochemical properties of wheat flour components (a series): VIII		Pentosans, wheat flour; analysis of (D'Appolonia and Gilles). Proteins; effect of fractions on	427
(Hoseney et al.)	191	dough properties (Lee and MacRitchie)	620
Fungus		Proteins; structural studies of	
Antimycotics in baking		(Cluskey and Wu)	203
(Pomeranz et al.)	23	Stretching; effect of proteolytic enzymes on (Kruger)	121
on corn oil composition (Jellum)	663	Vital; effect on dough rheology (Příhoda and Bushuk)	717
		Glutenin	
		Corn; changes in developing	
Genetics, Triticale starch; characteristics compared with		normal and opaque-2 endosperm (Murphy and	226
parent durum and rye (Klassen and Hill)	647	Dalby) Evidence for in wheat; in	336
and min)	047	developing endosperm	
Gelation		(Bushuk and Wrigley)	448
Soybean globulin; protein-lipid interaction in (Catsimpoolas	1.50	Evidence for in wheat; stability towards dissociation (Heubner	460
and Meyer)	159	and Rothfus) Probable composition of Pronase	469
solvents on (Catsimpoolas and		digests (Bietz and Rothfus)	677
Meyer)	150	Relation to spaghetti firmness and	
Wheat starch; effect of		color (Walsh and Gilles)	544
monoglycerides on (Longley and Miller)	81	Structural studies of (Cluskey and Wu)	203
Gelation phenomena of soybean globulins (a series): II and III		Glycerol, see Lipids	
(Catsimpoolas and Meyer)150	, 159	Glycine, radioactive; in traces studies	
Gliadin		of D-glucose browning reaction (Lee and Liau)	238
α-, wheat; apolar electrochemical bonding; relation to pH		(Lee and Linu)	230
(Greene and Kasarda) Alpha-helical structure of	601		
(Cluskey and Wu)	203		
Probable composition of Pronase	200		
digests (Bietz and Rothfus) Wheat flour; characterization by	677		
specific color reaction (Silano and Pocchiari)	445	Hagberg falling number test;	
and roccinari)	443	sample-size error in (Tipples)	85
Glucofructans, durum wheat; structures of two series (Medcalf		Heterogeneity of soybean trypsin inhibitors (a series): II (Obara and	
and Cheung)	1	Watanabe)	523
Glutelin, rice endosperm; extraction		Hoeppler consistometer; in measurement of dough viscosity	50
and fractionation of (Tecson et al.)	168	(Přihoda et al.)	59
ai.)	200	Hominy feed; nutritive value of (Wall	
Gluten		et al.)	456
Electron spin resonance spectra of			
wheat flour (Windle and	351	Humidity; effect on microflora of stored. Y-irradiated rice (Ito et al.)	140

Hoeppler consistometer; dough		Spaghetti firmness testing;	
elasticity and viscosity		instrument for (Walsh and	544
measurement (Pfihoda et al.)		Gilles)	344
Infrared studies of wheat gluter		Spaghetti firmness testing;	
proteins (Cluskey and Wu)		improved apparatus for	E E A
Isoelectric focusing; in model		(Matsuo and Irvine)	554
browning reaction (Lee and	l	Statistical analysis; for protein	
Liau)	238	inheritance in three	
Isoelectric focusing; for effect of		generations of sorghum grain	
phytate on soybean proteins	3	crosses (Haikerwal and	
(Wang)	229	Mathieson)	690
Isoelectric focusing; for		Statistical analysis; to relate	
differences in commercial		protein composition to	
soybean trypsin inhibitors		spaghetti quality (Walsh and	
(Wang)		Gilles)	544
Isoelectric precipitation; to		Sugar-snap cookie test; to	
denature soybean proteins		determine lipid contribution	
(Nash et al.)	360	to flour (Kissell et al.)	655
Muller's; adaptation to		Taste-panel; for soybean flour	
extensigraph (Prihoda and		flavor and aroma (Kalbrener et	
Bushuk)	609	al.)	595
Neutron-activation; vs. Kjeldahl in	007	Tyrosinase; rapid screening test	
measuring flour protein (Tsen		for (Abrol et al.)	466
and Martin)	721	X-ray; in studies of internally	
Optical rotatory dispersion,	121	damaged wheat kernels	
circular dichroism, and		(Chung and Converse)	108
infrared studies of wheat		(Chung and Converse)	100
		Wissessessiams, in stored	
gluten protein (Cluskey and	202	Microorganisms; in stored	140
Wu)	203	γ -irradiated rice (Ito et al.)	140
For phytic acid measurement in	212	24.00	
wheat (Wheeler and Ferrel)	312	Millfeeds	
Pressure measurement of yeasted		Corn wet-milling by-products, in	
doughs (Matsumoto et al.)	669	fowl, rat, and swine diet	
Processing reconstituted sorghum		(Bayley et al.)	27
feed; four treatments in		Wheat shorts; effect of fiber on	
(Sullins et al.)	567	nutritive value (Ranhotra et	_
Proton magnetic resonance; to		al.)	9
graph starch behavior in			
gelatinization (Jaska)	437	Milling	
Purification; of peptide hydrolase		Dry, of corn; isotonic buffer	
(BAPA-ase) from malted		conditioning for (Christianson	
wheat (Kruger)	512	et al.)	558
Purification; of zein (Danzer and		Dry, of opaque-2 corn (Brekke et	
Rees)	118	al.)	499
Solvents; effect on flavor of		Dry, of sorghum grain; effect of	
soybean flakes (Eldridge et al.)	640	endosperm type on yield	
Sonication; in glutenin studies		(Maxson et al.)	478
(Huebner and Rothfus)	469	Wet; of aflatoxin-contaminated	
Spectrophotometry; to determine		corn (Yahl et al.),	385
amylose-amylopectin content		Wet, of corn; distribution of	
in gelatinized wheat-starch		tocopherols in (Grams et al.) .	356
solutions (Dahle)	706	Wet; sodium hydroxide as	
solutions (Dame)	,00	sorghum-grain dehulling agent	
			528
Spectrophotometry, fluorescent,		(Diessin et al.)	-20
and dialysis; in wheat gliadin			
structural studies (Greene and		Milo, starch from; in breadmaking	
Kasarda)	601		191

Pronase; in analysis of gliadin and glutenin (Bietz and Rothfus)	677	Wheat flour; methods for determining (Tsen and Martin)	721
Protein		Wheat protein concentrate;	
Albumin, see main entry		supplement for white flour	
Barley kernel; changes during		(Ranhotra et al.)	699
maturation (MacGregor et al.)	255	Wheat shorts vs. wheat protein	
Barley, peptide hydrolase; in		concentrate in rat diet	•
malting and brewing (Prentice		(Ranhotra et al.)	9
et al.)	587	Zein; laboratory purification of	110
Barley, peptide hydrolase; in		(Danzer and Rees)	118
maturing grain (Prentice et al.)	714	Duridavina in stared wheat offeet of	
Cala flavor affect of ablasias on		Pyridoxine, in stored wheat; effect of fumigation on (Polansky and	
Cake flour; effect of chlorine on (Tsen and Kulp)	247	Toepfer)	392
Cake flour; effect of chlorine on	241	Toepier)	392
water-soluble protein (Kissell)	102		
Coconut; characterization of	102		
isolates (Samson et al.)	182		
Corn; changes in developing			
normal and opaque-2			
endosperm (Murphy and			
Dalby)	336		
Corn; concentrates, dry-milled		γ-Radiation; and stored-rice	
(Christianson et al.)	558	microflora (Ito et al.)	140
Grain; rapid calculation of		,	
(Johnson and Craney)	276	Radiation; infrared studies of gluten	
Gluten, glutenin, and gliadin, see		proteins (Cluskey and Wu)	203
main entries		•	
Hominy feed; nutritive value of		Radioactive tracers; in model	
(Wall et al.)	456	browning studies (Lee and Liau) .	238
Lipoprotein; see main entry			
Rapeseed; extraction and analysis	0.1	Rapeseed, protein isolate; extraction	
of (Owen et al.)	91	and analysis of (Owen et al.)	91
Rice endosperm; fractionation of			
glutelin and prolamin (Tecson	168	Rice	
et al.)		Amino acids of bleeding sap and	
isoelectric focusing (Wang)	229	developing grain (Cagampang	533
Soybean; denaturation by	22)	et al.)	333
isoelectric precipitation (Nash		Protein; fractionation of glutelin	169
et al.)	360	and prolamin (Tecson et al.) .	168
Soybean globulin; gel formation	300	Starch; in breadmaking (Hoseney	191
with water-miscible solvents		et al.)	171
(Catsimpoolas and Meyer)	150	reconstituted flours (Sollars	
Soybean globulin; action with		and Rubenthaler)	397
lipids in gelation		and redominance)	
(Catsimpoolas and Meyer)	159	Rye	
Spaghetti; relation to quality		Starch; in breadmaking (Hoseney	
(Walsh and Gilles)	544	et al.)	191
Starch-binding effects of		Starch; comparison with triticale	
wheat-flour proteins (Dahle) .	706	(Berry et al.)	415
Wheat; method of classification		Starch; comparison with triticale	- 15
(Silano and Pocchiari)	445	(Klassen and Hill)	647
Wheat flour; supplementation of		Starch; as substitute in	
lysine by fish protein	202	reconstituted wheat flour	202
concentrate (Stillings et al.)	292	(Sollars and Rubenthaler)	397

Salt, encapsulated; effect on		Whey proteins; effect of phytate	
antimycotics in dough (Pomeranz et al.)	23	level on isoelectric focusing (Wang)	229
Solvents		Soybean trypsin inhibitor	
In gluten protein confirmational		Commercial varieties; isoelectric	
studies (Cluskey and Wu)	203	point differences in (Wang)	229
Petroleum ether; for barley flour		Stability of DEAE-chromato-	
oil lipoprotein (Hoseney et al.)	223	graphic fractions to heat	
		(Obara and Watanabe)	523
For rice glutelin and prolamin	1.00	Constant	
(Tecson et al.)	168	Spaghetti	
For soybean flakes; effect on flavor (Eldridge et al.)	640	Compressibility as index of bite and texture; testing apparatus	
navoi (Eluniage et al.)	040	for (Matsuo and Irvine)	554
Sorbic acid, as dough antimycotic;		Quality; relation to protein	
interaction with capsulated salt		composition (Walsh and	
(Pomeranz et al.)	23	Gilles)	544
(10.11.11.11.11.11.11.11.11.11.11.11.11.1			
Sorghum		Starch	
Alkali dehulling; effect on grain		In baking; effects of wheat and of	
composition and wet-milling		other types (D'Appolonia and	
characteristics (Blessin et al.) .	528	Gilles)	625
Grain; test milling of (Maxson et		reconstituted with wheat and	
al.)	478	other starches (Sollars and	
Grain; total protein and amino		Rubenthaler)	397
acids of Nigerian varieties (Haikerwal and Mathieson)	690	Breadmaking properties of, from	371
Reconstituted; kernel changes and	090	wheat (Hoseney et al.)	191
feed efficiency (Sullins et al.)	567	Barley kernel; changes during	
White; pigment characterization		maturation (MacGregor et al.)	255
(Nip and Burns)	74	Cowpea; analysis of (Tolmasquim	
		et al.)	132
Southern corn leaf blight; effect on		In dough conditioning;	
corn oil composition (Jellum)	663	interaction with Polysorbate 60 (Langhans and Thalheimer)	283
		Gelatinization; detection by	203
Soy, flours and isolates; aromas and		proton magnetic resonance	
flavors of (Kalbrener et al.)	595	(Jaska)	437
Cour have much manimate analysis		Gelatinization; effects of	
Soya-bean meal; proximate analysis and methionine content (Yannai		monoglycerides on (Longley	
and Zimmermann)	40	and Miller)	81
und Zimmermann)	40	Triticale; characterization and	
Soybean		comparison with other grains	
Defatted flakes; hexane:alcohol		(Berry et al.)	415
azeotrope extractions of		Triticale; comparison to parent	
(Eldridge et al.)	640	durum and rye (Klassen and	647
Gelation; globulin-solvent		Wheat; electron spin resonance	0
interaction in (Catsimpoolas	1.50	spectra of (Windle and Evans)	351
and Meyer)	150	Wheat flour protein; some	
Gelation; protein-lipid interaction	150	starch-binding effects of	
in (Catsimpoolas and Meyer). Proteins; denaturation by	159	(Dahle)	706
isoelectric precipitation (Nash		Steam pelleting, of corn wet-milled	
et al.)	360	by-products; effect on	
Tryptophan; analysis for (Sessa et		digestibility for animal feed	
al.)	321	(Bayley et al.)	27

Storage studies		Viscosity	
Adsorption kinetics of yellow corn water vapor (Park et al.)	14	Dough, see main entry MacMichael; role of wheat starch	
Effect of fumigation on Vitamin B-6 of wheat (Polansky and	202	and other starches in (Sollars and Rubenthaler)	397
Toepfer)	392	Soybean gel; effect of solvents on (Catsimpoolas and Meyer)	150
humidities; microflora of (Ito et al.)	140	Vitamin	
On reconstituted sorghum grain		B-6, see Pyridoxine	
(Sullins et al.)	567	Niacin, see main entry E, see Tocopherols	
Studies with radioactive tracers (a series): XVII (Lee and Liau)	238		
Sugars		Water vapor; adsorption kinetics for	1.4
Barley kernel; changes during		sound yellow corn (Park et al.)	14
maturation (MacGregor et al.)	255	Wheat	4
D-Glucose, in browning reaction		Club; and bread loaf volume	
with glycine; radioactive tracer	220	(Hoseney et al.)	191
study of (Lee and Liau)	238	Kernel breaking strength; formula	.,.
Reducing, in food products;		for predicting (Chung and	
automated method of determining (Oborn et al.)	270	Converse)	108
determining (Oboth et al.)		Kernel damage, internal, from	
		wet-dry cycles (Chung and	108
		Converse) Products; nutrient composition of	100
		(Hepburn)	369
Thioglycollic acid; effect on barley	97	Protein concentrate; supplement	
proteolysis (Bhatty)	21	to white flour (Ranhotra et	
TNS (2-p-toluidinylnaphtha-		al.)	699
lene-6-sulfonate) in Q-gliadin		Red River 68; effect of cysteine	
studies (Greene and Kasarda)	601	on baking properties of	540
		(Finney et al.)	340
Tocopherols, corn; distribution in		rat diet (Ranhotra et al.)	9
wet- and dry-milled products	356	120 0.00 (1122200100000)	
(Grams)	330	Wheat matric start interesting (
Triticale, starch, see Starch		Wheat protein-starch interaction (a series): I. (Dahle)	706
Timedic, statem, see Ballem		series). I. (Danie)	700
Tyrosinase, see Enzymes			
Tryptophan, soybean; analysis of		Yeast	
(Sessa)	321	In baking; protection from antimycotics (Pomeranz et al.)	23
		Measuring internal pressure of	"
Ultrasonics; in glutenin studies (Huebner and Rothfus)	469	doughs (Matsumoto et al.)	669
		Zein; laboratory purification of	
		(Danzer and Rees)	118
Visco/amylo/graph studies on		T	
defatted flour slurries (Langhans and Thalheimer)	283	Zinc; content of three Middle Eastern wheats (Ghanbari and Mameesh)	411